

IN THE CLAIMS.

Claims 1. – 48 (Canceled)

49. (Previously Presented) Apparatus for exposing a pattern on a photosensitive surface comprising:

- a laser light source providing a beam formed of successive substantially instantaneous laser pulses separated by a time interval;

- a data signal source that provides data signals;

- a modulator that receives the beam and the data signals and selectively modulates the beam with a modulating signal responsive to the data signals for a time period longer than said time interval, such that the modulating signal is operative to modulate at least two successive pulses; and

- an optical subsystem that receives the modulated beam and projects an image of the modulator onto a photosensitive surface to expose a pattern thereon according to said modulating signal,

wherein the modulating signal is an acoustic wave and wherein an attribute of the modulating signal changes between at least two successive pulses.

50. (Original) Apparatus according to claim 49 wherein the modulator is an acousto-optical modulator.

51. (Original) Apparatus according to claim 49 wherein the modulator has a defined length, and the attribute is the length of the acoustic wave in the modulator.

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52. (Original) Apparatus according claim 51 and wherein the shape of a spot formed by a pulse in the beam, as projected by the optical subsystem, is at least partly defined by the length of the acoustic wave in the modulator.

53. (Original) Apparatus according to claim 51 and comprising a scanning subsystem for scanning the image of the modulator along the photosensitive surface.

54. (Original) Apparatus according to claim 53 wherein the acoustic wave propagates in the modulator at a first velocity having a first rate of propagation and a first direction, and the image of the modulator is scanned across the photosensitive surface at a velocity that is related to the velocity of propagation of the acoustic wave, but in the opposite direction.

Claims 55. - 60. (Canceled)

61. (Previously Presented) Apparatus for recording an image on a photosensitive surface, comprising:

- a laser pulsed light source that produces pulsed light having a first wavelength in the IR spectrum and a pulse repetition rate;
- a wavelength converter comprising an LBO crystal type non-linear medium external to the laser cavity of said laser pulsed light source that receives said pulsed light and outputs wavelength converted pulsed light having a second wavelength which is less than the first wavelength;
- a multi-channel modulator that receives and modulates the wavelength converted pulsed light; and
- a scanner that scans the modulated wavelength converted pulsed light over the surface.

Claims 62. - 65. (Canceled)

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66. (Previously Presented) Apparatus according to claim 61 and wherein the wavelength converted pulsed light has a wavelength which is in the UV spectrum.

67. (Original) Apparatus according to claim 61 and wherein the wavelength converted pulsed light has a wavelength which is in the UV spectrum.

Claim 68. (Canceled)

69. (Previously Presented) Apparatus according to claim 61 and wherein the pulse repetition rate is less than a data rate at which said modulator modulates said pulsed light.

70. (Original) Apparatus according to claim 61 and wherein the pulse repetition rate is multiplied by a pulse repetition rate multiplier.

71. (canceled)